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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,185	04/19/2001	Eduard Daniel Leendert Schmidt	S-30683A	1538

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EXAMINER

MOONAN, FRANCIS P

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 12/14/2001

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/839,185	SCHMIDT ET AL.	
	Examiner	Art Unit	
	Francis P Moonan	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 06 August 2001.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) _____ is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) 1-14 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

The proposed amendments to the specification and the claims in Paper No. 6 filed on 19 April 2001 are acknowledged, and the amendments have been entered.

Claims 1-14 are restricted in the office action that follow.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I. Claims 1-14, drawn to drawn to a **Method** of Increasing the Probability of Vegetative Reproduction of a Plant by Transgenically Expressing a Gene whose Protein Does Physically Interact with the Protein of a Somatic Embryogenesis Receptor Kinase (SERK) Gene, wherein said **Gene encodes the Sequence comprising SEQ ID N0: 2, and the resultant plant**, for example classified in class 800, subclass 290.

Group II. Claims 1-14, drawn to drawn to a **Method** of Increasing the Probability of Vegetative Reproduction of a Plant by Transgenically Expressing a Gene whose Protein Does Physically Interact with the Protein of a Somatic Embryogenesis Receptor Kinase (SERK) Gene, wherein said **Gene encodes the Sequence comprising SEQ ID N0: 4, and the resultant plant**, for example classified in class 800, subclass 278.

Group III. Claims 1-14, drawn to drawn to a **Method** of Increasing the Probability of Vegetative Reproduction of a Plant by Transgenically Expressing a Gene whose Protein Does Physically Interact with the Protein of a Somatic Embryogenesis Receptor Kinase (SERK) Gene, wherein said **Gene encodes the Sequence comprising SEQ ID N0:6, and the resultant plant**, for example classified in class 800, subclass 298.

Group IV. Claims 1-14, drawn to drawn to a **Method** of Increasing the Probability of Vegetative Reproduction of a Plant by Transgenically Expressing a Gene whose Protein Does Physically Interact with the Protein of a Somatic Embryogenesis Receptor Kinase (SERK) Gene, wherein said **Gene encodes the Sequence comprising SEQ ID N0:8, and the resultant plant**, for example classified in class 800, subclass 295.

Group V. Claims 1-14, drawn to drawn to a **Method** of Increasing the Probability of Vegetative Reproduction of a Plant by Transgenically Expressing a Gene whose Protein Does Physically Interact with the Protein of a Somatic Embryogenesis Receptor Kinase (SERK) Gene, wherein said **Gene encodes the Sequence comprising SEQ ID N0:10, and the resultant plant**, for example classified in class 435, subclass 468.

Group VI. Claims 1-14, drawn to a **Method** of Increasing the Probability of Vegetative Reproduction of a Plant by Transgenically Expressing a Gene whose Protein Does Physically Interact with the Protein of a Somatic Embryogenesis Receptor Kinase (SERK) Gene, wherein said **Gene encodes the Sequence comprising SEQ ID N0:12, and the resultant plant**, for example classified in class 435, subclass 440.

Group VII. Claims 1-14, drawn to a **Method** of Increasing the Probability of Vegetative Reproduction of a Plant by Transgenically Expressing a Gene whose Protein Does Physically Interact with the Protein of a Somatic Embryogenesis Receptor Kinase (SERK) Gene, wherein said **Gene encodes the Sequence comprising SEQ ID N0:14, and the resultant plant**, for example classified in class 435, subclass 419.

Group VIII. Claims 1-14, drawn to a **Method** of Increasing the Probability of Vegetative Reproduction of a Plant by Transgenically Expressing a Gene whose Protein Does Physically Interact with the Protein of a Somatic Embryogenesis Receptor Kinase (SERK) Gene, wherein said **Gene encodes the Sequence comprising SEQ ID N0:16, and the resultant plant**, for example classified in class 536, subclass 23.6.

Claims 1-14 will be examined to the extent that they read on the elected invention.

The inventions are distinct, each from the other because:

Applicants are reminded that nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute **independent and distinct** inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such nucleotide sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 et seq. **This requirement is not to be construed as a requirement for an election of species, since each nucleotide and amino acid sequence is not a member of a single genus of invention, but constitutes an independent and patentably distinct invention.**

The inventions of Groups I -VIII are unrelated to each other. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different

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modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01).

In the instant case the inventions of Groups I -VIII each comprise a method utilizing a transgene that is not required of the other, which may produce a phenotypic effect in a plant resulting in a biochemically, physiologically, anatomically, or morphologically different function which is effected by an entirely different mode of operation. The protein sequences of the inventions of Groups I-VIII each comprise proteins which are not disclosed as capable of used together, and their tentative identification by sequence homology suggests that they have different modes of enzymatic activity such as proteolytic activity, promoter binding activity, or different modes of operation that may be interpreted by the different peptide motifs identified from their deduced peptide sequence.

Furthermore, the inventions of the Groups are classified in different classes and subclasses, and a search of one Group is not required of the others, and a search of all of the Groups would place an undue burden of search on the examiner.

Thus the inventions of Groups I-VIII are each capable of being separately made, independently used, and the patentability of one would not render the others obvious or unpatentable.

Because these inventions are independent and distinct for the reasons stated above and have acquired a separate status in the art as shown by their different classification, the search for one group is not required of the others, and a search of all of the Groups would place an undue burden of search on the examiner, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

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currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Francis Moonan, whose telephone number is (703) 605-1201. The examiner can normally be reached on Monday through Friday 9:00 AM to 5:00 PM (E.S.T.)

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Hutzell, can be reached at (703) 308-4310. The fax phone number for this Group is (703) 308-4315. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Francis Moonan, Ph. D.
12 December 2001

DAVID T. FOX
PRIMARY EXAMINER
GROUP 180-1638

David T. Fox